

In the specification:

Replace paragraph 12 on page 4 with:

[0012]

The description herein makes reference to the accompanying drawings wherein like reference numerals refer to like parts throughout the several views, and wherein:

FIGURE 1 is a schematic representation of the vision system of the present invention.

FIGURE 2 illustrates the present invention using a first light source.

FIGURE 2A is an image captured using the first light source.

FIGURE 3 illustrates the present invention using a second light source.

FIGURE 3A is an image captured using the second light source.

FIGURE 4 is a third image created by taking the absolute value between FIGURES 2A and 3A.

FIGURE 5 is a fourth image created by taking the minimum between FIGURES 2A and 3A.

FIGURE 6 is a flow chart illustrating the process of the present invention.

Replace paragraph 18 on page 6 with:

[0018]

With reference to FIGURES 2 and 3, as well as the flow chart illustrated at FIGURE 6 vision system **10** captures two distinct images of substrate **22**, at **40** and **42**. Each image is captured by camera **12**. As shown in FIGURES 2 and 2A the first image, or image 1 is captured using illumination from light source **16** and the second image, or image 2 is captured using illumination from light source **18**. As shown in FIGURES 1, and 2 when image 1 is captured with light source **16**, 3-D feature **20** will produce a glint **24** on the side of feature **20** distal from light source **16** and a feature **20** will produce shadow **26** on the side of defect **20** proximate to light **16**. As captured by camera **12**, and illustrated by FIGURE 2A, glint **24** will result in a locally higher gray scale values and shadow **26** will result in locally lower gray scale values. In the typically case, glint **24** will result in enough light to result in a

gray scale value of 255. Image 1, as captured by camera 12 includes a plurality of pixels where the pixels have an address of a value. The address is characteristic of a location on the substrate.

Replace paragraph 21 on page 7 with:

[0021]

With reference to FIGURE 6 there is shown a flow chart describing, in its majority, the operation of image processor 14. As shown image 1 and image 2 are captured at 40 and 42. As shown at 44 the pixel values from image 1 are subtracted from the pixel values image 2 on a pixel address by pixel location basis. Thus, for 3-D data, glints are subtracted from shadows and shadows are subtracted from glints, each resulting in a comparatively high or bright value. For 2-D data the pixel values for any given pixel location in either of image 1 or image 2 will be the same and if not close to the same. Thus, subtracting image 1 from image 2 for 2-D data will result in values of zero, or not much greater. Image 3 is created as the absolute value between the difference between image 1 and image 2. FIGURE 4 illustrates the absolute value between the difference between image 1 and image 2 where the background is black and both glints are illustrated.